0.00

Memo

QC

Quality Control

									DQA:	Date:	
NCR: Ye	es / No	.*			WORK ORDER NON-C	ONFOR	MANCE / UP		QA Closed:	Date:	
Work Orde	r·				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No	o				Rework Scrap Use-as-is Work Order Update		Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other		•									
Process											
Supplier											

Landing Gear General Pressure/Forced Grain Ovalized Bend Bending Temperature/Cure BOM/Route Over/Under tolerance Centre Not Concentric to O/S Hardware Weld Cracks Broken/Damaged Inspection Incomplete Part Incorrect Instructions Incomplete/Unclear Wrong Stock Pulled Crushed/Crimped. Part Lost/Missing Burrs Part Moved Cuffs Contamination Maintenance Mislabeled Positioned Wrong Heat Treat Countersink Other Power Loss/Surge Inspection Strip in Tube Cut Too Short Misread Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

FAULT CATEGORY

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Training Unapproved

Work Order January-23-13 8:		112		*961	12*				-			Page 2
Revision ID:	03065-3 tep Spacer			Accept	*N900	040	100)*	Setup	Start Stop	*N:	S1* S2*
Start Date: 1 Required Date: 2 Reference:	/22/13 /22/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item I Customer:	D:						
Approvals:		n:	Date:			ate:			Run	Start Stop	1/1	R1* R2*
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
130 Small Fab Small Fab		Small Fab Memo Deburr Stack		0.00	NIA	SB		-				
140 *140* Brake NC Brake NC		NC BRAKE Memo Bend as per l	Dwg D3065	0.00				42				13/03
150 *150* QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00				4) (D)	1 —			

NCR:	Yes	/	No
		,	

DQA: _____ Date: _

NCR: Y	es / No				WORK ORDER NON-C	CONFOR	RMANCE / UP	טיטאוב	QA Closed:	Date:	
Work Orde	r·				DISPOSITION			AGAINST DE	PARTMENT	PROCESS	
Part N	· · · · · · · · · · · · · · · · · · ·				Rework Scrap	Tho	Skid-tube Machining moforming	Crosstube Small Fab Finishing	ł	Water Jet d. Eng. Coor.	Engineering Quality Other
NCR N	0.				Use-as-is Work Order Update] 'ne	Large Fab	Composite	Nec/stol	Supplier	
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief En	g Desc	cription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator							-				
Material											
Setup											
Other											
Process	_										
Supplier											
Training											
Unapproved								<u>-</u>	<u> </u>		
						AULT CAT	EGORY				
Landin	ng Gear				General	<u> </u>		<u> </u>	٦		70
1	Bending			_	Bend	Grain		<u> </u>	Ovalized	 -	Pressure/Forced
	Centre N	ot Conce	ntric to (^{O/S}	BOM/Route	Hard		<u> </u>	Over/Under	}	Temperature/Cure
-	Cracks				Broken/Damaged	\mathbf{H}	ction Incomplete	, 	Part Incorre		Weld
-	Crushed/	Crimped			Burrs	<u> </u>	ictions Incomplete	/Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs		•	<u> </u>	Contamination	 	tenance	<u> </u>	Part Moved		
ļ.	Heat Trea			<u> </u>	Countersink	 	beled	, 	Positioned \	_	7 ₀₄₅
	Inspectio	-	Tube	<u> </u>	Cut Too Short	Misre		<u></u>	Power Loss,	'Surge	Other
}	Ripples in			_	Drill Holes	Offse					
ļ	Torque W			ր <u> </u>	Drawing	\vdash	f Calibration				
ļ	Turning S			_	Finish	 	of Sequence				
i	Wave/Tw	vist in Tul	be	- 1	Folio	Outsi	de Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		112		*961	12*				Page 3
Item ID: Revision ID: Item Name:	D3065-3 Step Spacer			Accept	*N90004	0100	* Se	tup Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	1/22/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item ID: Customer:				
Approvals:		in:		Tooling: SPC (Y/N):	Date:		Ru	in Start Stop	"NRT"
Sequence ID/ Work Center II 160 *160* HandFinish Hand Finishing	D	Operation Description Chemical Conversion Co	at per QSI005 4.1	Set Up/ Run Hours 0.00	Tool ID Tool		Accept Qty		Reject Insp. Number Stamp
170 *170* QC Quality Control	·	QOS-Inspect Part Finish Memo		0.00 27 0.00 13 3	, 1	-	42/		
180 *18 Packaging		Identify as per dwg & Sto	ock Location: GA	0.00			42	<i>,</i>	\(\sigma_13 \)

Packaging

										DQA:	Date	
NCR: Y	res / No				WORK ORDER NON-	-COI	NFORI	MANCE / UP	PDATE	QA Closed:	Date	:
Work Orde	or.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part N	lo				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root		I	1	Descri	iption of work order update		nitial	Ac	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance		ief Eng		cription	Date	Verification	QC Inspector
Doc/Data						-						
quip/Tooling						- [`	
Operator										ļ	:	
√aterial						į						
Setup												
Other												
Process												
Supplier												
Fraining												
Jnapproved										1	<u> </u>	
						FAUL	T CATE	GORY				
Landir	ng Gear			_	General		1			٠		Pressure/Forced
	Bending				Bend	-	Grain		ļ	Ovalized Over/Under		Temperature/Cure
,		lot Conce	ntric to (^{)/s} -	BOM/Route	-	Hardwa		-	Part Incorre	-	Weld
	Cracks	/c-:			Broken/Damaged	\vdash	⊰ ∶	ion Incomplete	/Unclose	Part Lost/M	 	Wrong Stock Pulled
		/Crimped	•	-	Burrs	-	Mainte	tions Incomplete	Juncieal	Part Moved		
İ	Cuffs Heat Tre	\a.t		-	Contamination Countersink		Mislabe		<u> </u>	Positioned		
		eat on Strip in	Tubo		Cut Too Short	\vdash	Misrea		<u> </u>	Power Loss,		Other
	Ripples i		ilube	\vdash	Drill Holes		Offset	<i>.</i>	L	J' 0 4 C' 1 CO 33/		10000
ŀ		Waves in I	Extrusion	, ⊢	Drawing	-	4	Calibration				
ļ	· ·	Soguence		·	Finish	\vdash	┥	Seguence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde January-23-13		112		*961	12*			·	,	Page 4
Item ID: Revision ID: Item Name:	D3065-3 Step Spacer			Accept	*N900	040	100³	s Setu	p Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	1/22/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item II Customer:	D:				
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		nte:		Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center I 190 *100*	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#		-	-	Reject Insp. Number Stamp

0.00

Memo

Quality Control

13-3-4

											DQA:	Date:	
NCR: Y	⁄es	/ No				WORK ORDER NON-	CON	NFORM	MANCE / UP	DATE			
											QA Closed:	Date:	
Work Orde	3 r ·					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orde	=1.					Rework	1		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	١o.					Scrap		1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is]	Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR N	10.					Work Order Update]		Large Fab	Composite]	Supplier	
Root					Descri	ption of work order update		nitial	Ac	tion	Sign &	<u> </u>	
Cause		Date	Step	Qty	1	or Non-conformance	1	ief Eng	i	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling												٠.	1
Operator			1				1						
Material													
Setup													
Other													
Process					-								
Supplier													
Training]								
Unapproved					<u> </u>		<u> </u>						
						F	AUL	T CATE	GORY				
Landi	ng (Gear				General		1		_	٦	_	٦
	L_	Bending				Bend		Grain			Ovalized	<u> </u>	Pressure/Forced
	_	Centre No	ot Concer	ntric to	O/S	BOM/Route	<u>_</u>	Hardwa			Over/Unde		Temperature/Cure
	L	Cracks			_	Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ect	Weld
1	l	Crushed/	Crimned		i i	Rurrs	1	Instruct	tions Incomplete/	Unclear	Part Lost/M	lissing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio Part Moved Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Picklist Print

January-23-13 8:55:03 AM

Work Order ID:

96112

Parent Item:

D3065-3

Parent Item Name:

Step Spacer

Start Date: 1/22/13

Required Date: 2/22/13

Page 1

Start Qty: 40.00

Required Qty: 40.00

Comments:

IPP: C02.11.01Incorporated D3066-1 IPPKJ/RF IPP Rev:D Now on Water Jet 06-04-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No		·· ·· · · · · · · · · · · · · · · · ·	100	sf	247.2023	0.2178	9 .17052 8 /0			<u>m13-a-</u> 5
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT022		247.2023252							
				12060)5	65.8254832							
				12119	97	64.996842							
				12213	36	31.78							
				12321	17	84.6			133	217			

NCR:	Yes	1	No
INCh.	162	/	INO

DQA: _____ Date: _

NCR: Ye	es / No				WORK ORDER NON-C	CONFOR	MANCE / UP		QA Closed:	Date	:
Work Orde	r:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No					Rework Scrap		Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR N	0				Use-as-is Work Order Update	Ther	moforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root				Descri	ption of work order update	Initial	Ac	ction	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data										·	
Equip/Tooling											
Operator											
Material											
Setup											
Other -											
Process	_										·
Supplier	_										
Training	_										
Unapproved		<u> </u>				1			<u> </u>	<u></u>	
		•				AULT CAT	EGORY				
Landin .F	g Gear				General	Grain		[Ovalized	_	Pressure/Forced
-	Bending	,		,, -	Bend BOM/Bouts	\vdash			Over/Under	toloranco	Temperature/Cure
-	Centre No	ot Conce	ntric to C)/5	BOM/Route Broken/Damaged	Hardw	are tion Incomplete	-	Part Incorre	⊢	Weld
-	Cracks Crushed/	د-نسمت مط		-	Burrs	\mathbf{H}	ctions incomplete	/Uncloar	Part Lost/M	-	Wrong Stock Pulled
-	Cuffs	Crimpea.		. -	Contamination		cenance	Volicieal	Part Moved		
}	Heat Trea	\ +		-	Countersink	Mislak		 	Positioned \		
-	Inspectio		Tubo	\vdash	Cut Too Short	Misre		<u> </u>	Power Loss,		Other
}	Ripples in	•	iube	H	Drill Holes	Offset		<u> </u>	J. 5 W.C. 2033/		Tourie
}	Torque W		vtrucion	, H	Drawing	—	Calibration		**		
-	Turning S			' ⊢	Finish		Sequence				
}	Wave/Tw			<u> </u>	Folio	⊢	le Dimensions				
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				1	1					

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	96112
Description: Step Spacer	Part Number:	D3065-3
Inspection Dwg: D3065 Rev: B	·	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.260	+/-0.010	1.265"	-		V	Jkmoi
3.260	+/-0.010	3.264"	-		V	·
5.260	. +/-0.010	5.261	_		٧	·
6.520	+/-0.010	6-522"	-		V	·
2.093	+/-0.010	2095"	-		Y	
3.936	+/-0.010	3.939"	-		V	
4.186	+/-0.010	4.190"	_		V	·
Ø0.129	+0.005/-0.000	0.129	-		V	
Ø1.250	+0.005/-0.000	1,250'			V	
Pitch 1.204	+/-0.005	1,207"			V	
0.040	+/-0.010	0.0397	-		V	
`						
	·					
		-			-	

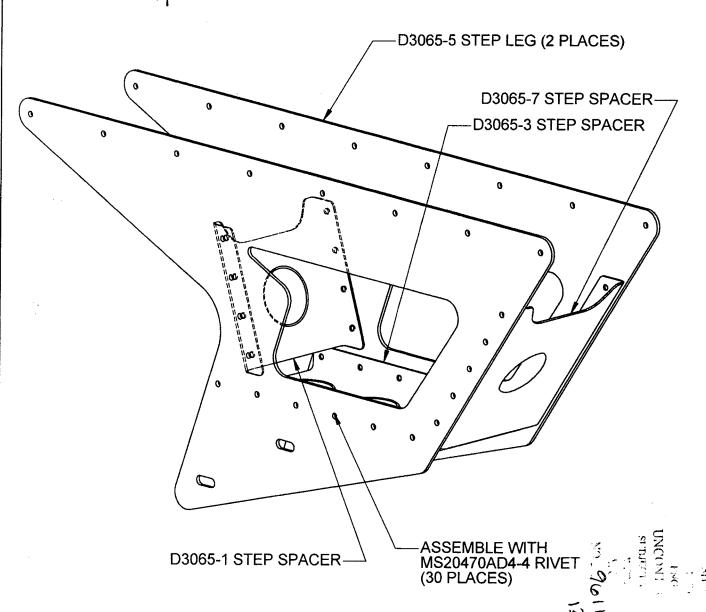
Measured by:	Jm	Audited by:	OAS A	Preliminary Approval:	
Date:	13-2.26	Date:	15°C21	Date:	

Rev	Date	Change	Revised by	Approved
Α	04.02.25	New Issue P/O D3065-041	KJ/RF	1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
В	04.08.12	Removed dimension 1.204	KJ/JLM	
С	06.06.23	Dwg Rev. changed	KJ/JLM	
D	07.09.06	0.040 dimension added	KJ/JLM , A	N.
E	12.10.10	Ø0.129 was Ø0.128	KJ W	T M



	DESIGN	DESIGN PRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
	CHECKED		APPROVED	DRAWING NO.	REV. B	
		8/1		D3065	SHEET 1 OF 5	
	DATE)r 00	TITLE	SCALE	
06.05.23			J5.23	STEP LEG ASSEMBLY	1:2	
	Α	02.09.11		NEW ISSUE		
	B 06.05.23		6.05.23	ADD 6061-T6 MATERIAL, ADD SLOTS TO D3065-5		

RELEASED 6 ct 20

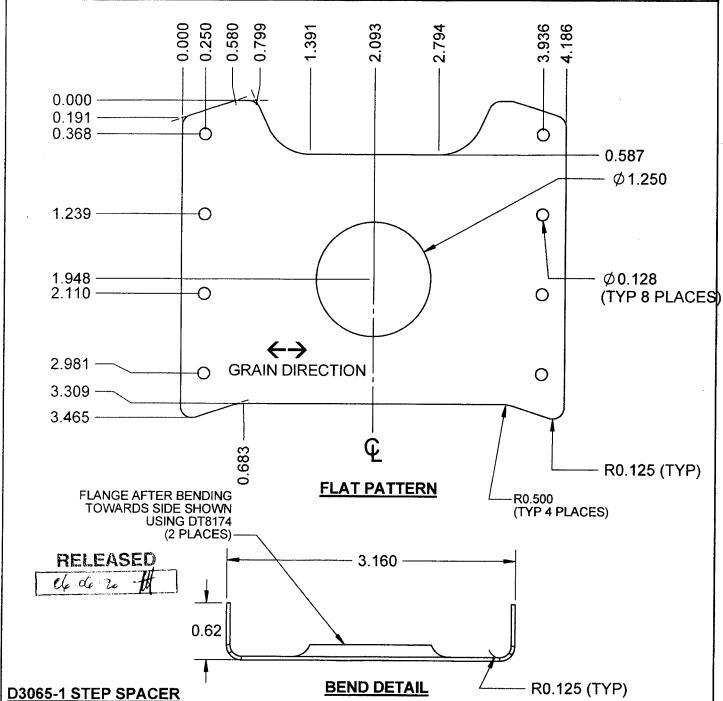


D3065-041 STEP LEG ASSEMBLY

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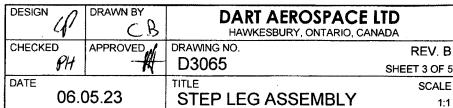


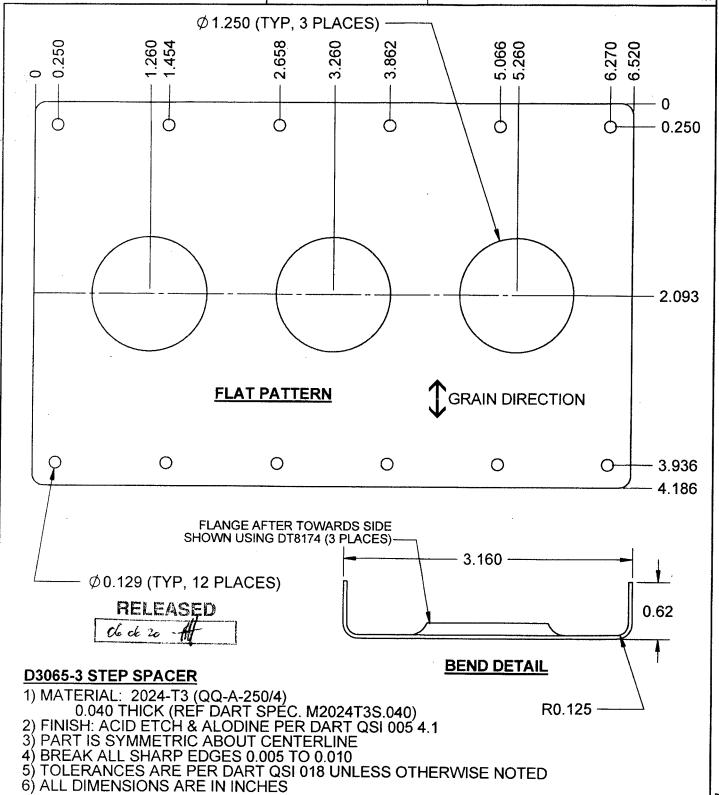


- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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96112

DATE SHOKE 06.05 B 23 5 DRAWING NO. STEP DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA G AS SEMBLY SHEET 4 OF 5 REV. B SCALE

06.ch RELEA 16.458 15.750 (2.250 PITCH) Ø0.128 (DRILL #30) (TYP 23 PLACES) 0 ٥ 0 1.640 Ω 8.325 3.460 3.484 (0.871 PITCH) (0.865 PITCH) 0.551 SEE DETAIL A 0.741 0.213 2.770 6.020 D3065-5 STEP LEG (1.205 PITCH) 1) MACHINE PER DWG FILE "D3065-5.SLDPRT" 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK (REF DART SPEC M6061T6S.080)

5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080)

FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
BREAK ALL SHARP EDGES 0.005 TO 0.010
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

SIL

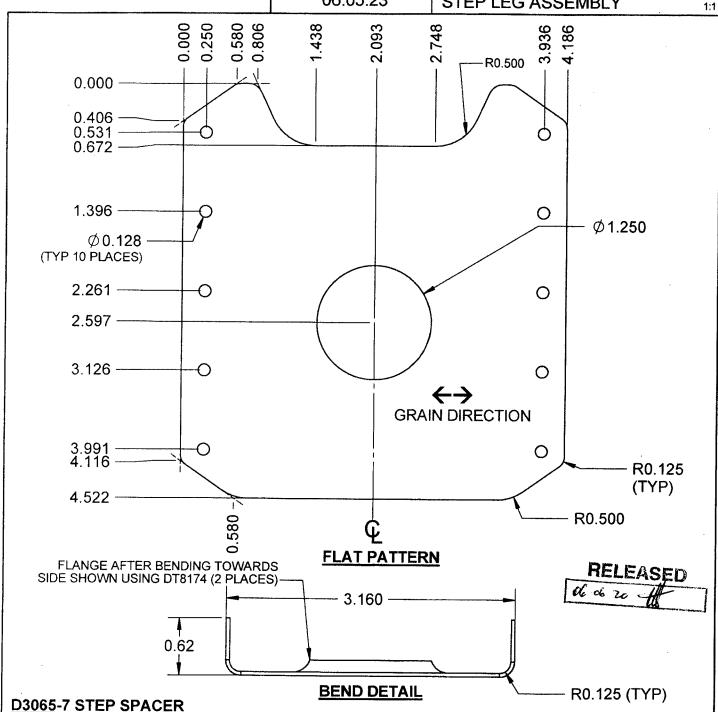
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BY DART AEROSPACE LTD.







- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
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- 6) ALL DIMENSIONS ARE IN INCHES

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